Round 7

First Half

(1) **In this organ, the parasympathetic and orthosympathetic plexuses control secretions, as well as smooth muscle contractions and expansions. After mastication, this organ produces pepsin. Chyme [kime] flows from this organ through the pyloris and pyloric sphincter into the (*)** duodenum. Heartburn is caused by hydrochloric acid produced by this organ escaping through the esophageal sphincter. For ten points, name this hollow organ that digests food between the esophagus and small intestine.

ANSWER: **stomach**

(1) Flowers have specialized structures for reproduction. For ten points each,

These segments of the corolla fall off as the fruit grows. They are usually oddly shaped or brightly colored.

ANSWER: **petal**s

The stigma is sticky so that this yellow grain will stick to it and fertilize the style. This substance, which contains the male gamete, is often carried from flower to flower by bees.

ANSWER: **pollen**

Pollen is produced by the microsporangium of this male flower structure, which is connected to the filament of the stamen.

ANSWER: **anther**s

(2) **These creatures developed a society in an Antarctic cave in the 19th century and have supposedly existed since the beginning of time. They are all male, as their creator deemed them "too ridiculous and dumb" to be female. Developed by (*)** Pierre Coffin, three of them help save the Queen of England from Scarlet Overkill in a 2015 film that ends with these characters following the evil Gru. For ten points, name these overall-clad yellow creatures from the *Despicable Me* franchise.

ANSWER: **Minion**s

(2) The bookies at William Hill paid off 58 bets at five thousand-to-one odds that this team would win the 2015-16 English Premier League under manager Claudio Ranieri. For ten points each,

Name this English soccer team, whose improbable - to say the least! - run to the Premiership title was powered by Jamie Vardy and Danny Drinkwater.

ANSWER: **Leicester** [less-ter] City (Football Club)

William Hill believed Leicester's chances of winning the Premier League were less than half as good as the chances that this singer of "Don't Be Cruel" and "Hound Dog" would be found alive during the year.

ANSWER: **Elvis Presley** (accept either or both names)

Another laughable longshot bet suggests that the odds that this lead vocalist and frontman of U2 will become the next Pope are five times more likely than the original odds on Leicester's title.

ANSWER: **Bono** (or Paul David **Hewson**)

(3) **Miep Gies** [meep gees] **protected this work, which is set at 263 Prinsengracht [PRIN-sin-GROKT] and details a budding romance with Pieter Van Daan. This work, a collection of letters written to (*)** "Kitty," was written in a "secret annex." It was published after its author's father, Otto, survived the Bergen-Belsen concentration camp. For ten points, name this work written by a fourteen-year-old Jewish girl who hid in Amsterdam from the Nazis.

ANSWER: The **Diary of a Young Girl** (or The **Diary of Anne Frank**; accept descriptions of the **journal**, etc., that Anne **Frank** kept)

(3) Answer some questions about dramatic structure. For ten points each,

This is the term for background information usually given at the beginning of a story.

ANSWER: narrative **exposition**

This is the culmination of the rising action of a story, during which the work's main conflict comes to a head and a turning point is reached.

ANSWER: **climax** (accept **crisis**)

This happens after a story's climax. Derived from the Old French for "to untie," this term refers to the resolution of the various plotlines in a story.

ANSWER: **dénouement** [day-NOO-man] (be lenient with pronunciation)

(4) **One president of this country was assassinated during a celebration of Operation Badr. A 1952 coup in this country overthrew King Farouk, ended the monarchy, and led to Sudan's independence four years later. That coup was led by the Free Officers Movement, which was led by this country's first President, (*)** Muhammad Naguib. Anwar Sadat once led, for ten points, what country in which Arab Spring protesters occupied Tahrir Square in Cairo?

ANSWER: Arab Republic of **Egypt**

(4) This man succeeded Hannibal Hamlin in one post. For ten points each,

Name this man who became president after the assassination of Abraham Lincoln. His presidency was highly controversial; he had more vetoes overruled by Congress than any other president.

ANSWER: Andrew **Johnson**

Congress didn't stop at overruling President Johnson's vetoes: Johnson was also the first president to undergo this process, in which Congress accused him of misdeeds and voted to remove him from office. This process has targeted the President twice; in both cases, the actual removal vote failed.

ANSWER: **impeach**ment (accept word forms)

Johnson's impeachment was spearheaded by members of the "Radical" faction of this party.

ANSWER: **Republican** Party (accept **G**rand **O**ld **P**arty, do not accept "Democratic-Republican")

(5) **A poem in this book declares "even the sparrow finds a home / and the swallow a nest for herself" because "happy are those who live in your house." This book praises a subject who "knit me together in my mother's womb" and declares that that person's (*)** word "is a lamp unto my feet / and a light unto my path." The twenty-third poem in this collection begins "The Lord is my shepherd / I shall not want." For ten points, name this book of the Bible that contains verses written by King David.

ANSWER: Book of **Psalms** (or **Tehillim**; prompt on "Bible" until it is read; prompt on "Old Testament")

(5) This god's cult center was located in the city of Heliopolis, and he was at various times syncretized with Atum and Amun. For ten points each,

Name this Egyptian sun god, considered the first being. He was the father of Shu and Tefnut.

ANSWER: **Ra**

Worshipers at this god's cult center in Memphis believed that this patron of craftsmen was the creator of the world. He is sometimes considered to be the father of the deified version of the doctor Imhotep.

ANSWER: **Ptah**

Another creator god was the ram-headed Khnum who was said to create human children's bodies from his potter's wheel. Khnum ruled the source of this body of water, whose flooding was of great significance to Egyptian agriculture.

ANSWER: **Nile** River

(6) **Changing this quantity may produce a magnetic field, and changing magnetic flux may induce voltage and this quantity through a loop of wire, according to Faraday's and Lenz's laws. In a parallel setup, components with less resistance receive more of this quantity, but all (*)** resistors in series receive the same amount of it. For ten points, name this quantity, equal to charge per time through a circuit, which can come in direct or alternating forms.

ANSWER: electric **current**

(6) This planet has the largest eccentricity of any in the solar system, getting as close as 0.3 astronomical units to the Sun and as far as 0.46 AUs. For ten points each,

Name this planet. It has the shortest orbital period, as it's the nearest to the Sun.

ANSWER: **Mercury**

Within 20, Mercury's orbit around the Sun takes this many days.

ANSWER: **88** days (accept any answer from **68** days to **108** days, including those answers)

NASA has sent two probes to Mercury: one launched in 1973 as the 10th and last probe in a series that studied the inner solar system, and the other launched in 2005 and was crashed into the planet in 2015. Name either.

ANSWER: **Mariner** 10 and/or **MESSENGER** (accept the **Mercury Surface, Space Environment, Geochemistry, and Ranging** probe, the expansion of the MESSENGER name)

(7) **Cities in this country, including Medan and Palembang, suffer from air pollution from fires set to clear land for palm oil production. The devastating Boxing Day tsunami of 2004 was triggered by an earthquake of the coast of one of this country's islands. This country's region of (*)** Kalimantan shares the island of Borneo with Brunei and Malaysia. Sulawesi, Sumatra, and Java are among the largest islands of, for ten points, what Southeast Asian country with capital Jakarta?

ANSWER: Republic of **Indonesia**

(7) This term names a second century AD collection of personal journal entries, including discussions of Stoic philosophy. For ten points each,

Give this term for a author's contemplative writings. This term also describes a spiritual practice in which one relaxes and preparing one's mind.

ANSWER: **meditation**

While on campaign, this Stoic Roman emperor wrote the aforementioned series of *Meditations*.

ANSWER: Marcus **Aurelius**

René Descartes explained this branch of philosophy in his *Meditations on First Philosophy*, using Aristotle's name for this study. This term describes the study of the nature of things.

ANSWER: **metaphysics**

Sixty Second Rounds

The categories are . . .

1. Literature and the Civil War

2. Treaty of Versailles

3. Agriculture

4. Miracles of Jesus

LITERATURE AND THE CIVIL WAR

Who or what...

(1) Was the anti-slavery novel written by Harriet Beecher Stowe that helped begin the war?

ANSWER: **Uncle Tom's Cabin**

(2) Wrote about the family of wounded Union chaplain Robert March in *Little Women*?

ANSWER: Louisa May **Alcott**

(3) Was the novel written by Stephen Crane about the soldier Henry Fleming, who tries to obtain the title injury?

ANSWER: The **Red Badge of Courage**

(4) Was the black abolitionist who founded the newspaper *The North Star*?

ANSWER: Frederick **Douglass**

(5) Included the characters Rhett Butler and Scarlett O'Hara in her novel *Gone with the Wind*?

ANSWER: Margaret **Mitchell**

(6) Is the three-day battle covered by Michael Shaara's historical novel *The Killer Angels*?

ANSWER: Battle of **Gettysburg**

Treaty of Versailles

The 1919 Treaty of Versailles...

(1) Ended what "War to End All Wars?"

ANSWER: **World War I** (or **WWI**)

(2) Was signed in what European country?

ANSWER: **France**

(3) Was signed by what losing country, a member of the Central Powers?

ANSWER: **Germany**

(4) Included what harsh financial penalties paid by the losing countries to the winners?

ANSWER: war **reparation**s

(5) Was somewhat, but not nearly fully, inspired by what Woodrow Wilson proposal that included freedom of the seas?

ANSWER: **Fourteen Points**

(6) Was preceded by what separate peace treaty between the Central Powers and Russia?

ANSWER: Treaty of **Brest-Litovsk**

Agriculture

Name the...

(1) Four-stomached ruminant that is the most common dairy livestock in America.

ANSWER: __cow__s (or __cattle__; accept equivalents)

(2) third member of the "Three Sisters" with beans and squash.

ANSWER: __corn__ (or __maize__)

(3) Red or yellow spotted insect that eats agricultural pests.

ANSWER: __ladybug__s

(4) Conservationist who investigated pesticide use in *Silent Spring*.

ANSWER: Rachel __Carson__

(5) Insecticide specifically targeted by *Silent Spring*, which endangered the peregrine falcon.

ANSWER: __DDT__ (or __dichlorodiphenyltrichloroethane__)

(6) American national bird poisoned by that insecticide.

ANSWER: __bald eagle__

Miracles of Jesus

What substance or affliction did Jesus...

(1) walk on to reach his disciples during a storm near Galilee?

ANSWER: **water** (accept **Sea** of Galilee)

(2) cure in many people who suffered from this limb-rotting disease?

ANSWER: **leprosy**

(3) multiply, along with loaves of bread, to feed the five thousand?

ANSWER: **fish**es

(4) cure a man in Bethsaida for whom people appeared "like trees?"

ANSWER: **blind**ness (accept descriptions of **not being able to see**)

(5) cure Lazarus of four days after he acquired this condition?

ANSWER: **death** (accept descriptions like "being **dead**")

(6) create for the guests at a wedding in Cana?

ANSWER: **wine**

Second Half

(8) **This man added one to a product of primes to show by contradiction that there were infinitely many of them. The square root of the sum of the squares of delta x and delta y gives the distance named for this man. Book 1, Proposition 5 of this man's magnum opus shows that the base angles of an isosceles triangle are equal; that work uses a series of (*)** postulates to establish a geometric system. For ten points, name this ancient Greek mathematician who wrote the *Elements*.

ANSWER: **Euclid**

(8) Identify the following about angle measures for ten points each.

This common system for measuring angles splits a full rotation into 360 units. Angles measuring between 0 and 90 of these units are called acute.

ANSWER: **degree**s

When measuring using radians instead of degrees, this is the value of a full rotation.

ANSWER: **two** times **pi** (accept **tau**)

This adjective is used to describe angles whose measures add up to pi radians, or 180 degrees.

ANSWER: **supplement**ary angles

(9) **A character created by this author rents a cottage heated by a small paraffin stove until the Red House owned by her father is returned to her. One of this author's title characters loses his parents to a hungry rhinoceros and is sent to live with (*)** Aunt Sponge and Aunt Spiker. Another of this author's title characters lives in a flat with four bed-ridden grandparents, including Grandpa Joe, until he finds a Golden Ticket. For ten points, name this author of *Matilda*, *James and the Giant Peach*, and *Charlie and the Chocolate Factory*.

ANSWER: Roald **Dahl**

(9) This play's epilogue apologizes if it has offended anyone, noting that if it has, "think...that you have slumber'd here/while these visions did appear." For ten points each,

Name this play, in which Theseus and Hippolyta are married and Oberon's wife Titania is tricked into falling in love with Nick Bottom, whose head has been transformed into a donkey's.

ANSWER: A **Midsummer Night's Dream**

A Midsummer Night's Dream is one of the 17 comedies written by this Elizabethan playwright.

ANSWER: William **Shakespeare**

In *A Midsummer Night's Dream*, this servant of Oberon retrieves the "love-in-idleness" flower and applies the love potion to seemingly everyone's eyelids. The play ends with this character's epilogue.

ANSWER: **Puck** (or **Robin Goodfellow**; accept either or both names)

(10) **An army of this city killed over 15,000 people in an ambush near Lake Trasimene. Cato the Elder made a point of reminding his fellow Senators of this city's crimes by ending his speeches "[this city] must be destroyed." According to legend, this city's 146 BC sacking was finished by (*)** salting the earth. Scipio Africanus defeated an army from, For ten points, what ancient city in north Africa that fought three Punic Wars against Rome, having been led in the second war by Hannibal?

ANSWER: **Carthage**

(10) Name the following modern Southeast Asian countries based on past ruling states for ten points each.

From 1954 until 1975, this country was split into a Communist North and a republican South. The Americans fought with the South in this country until shortly before the fall of Saigon.

ANSWER: (North and/or South) **Vietnam**

The Khmer empire ruled in this modern-day country, building the temple complex at Angkor Wat.

ANSWER: **Cambodia**

The Ayutthaya kingdom was centered in what became Siam and what is now this modern country.

ANSWER: **Thailand**

(11) **One type of these structures is labeled as fringing and may develop, over millions of years, into an atoll. These structures develop on top of the calcium carbonate skeletons of the previous generations. These regions are incredibly biodiverse, but are threatened by rising (*)** sea temperatures that kill off polyps and "bleach" their structures. For ten points, name these colorful underwater habitats, most often found in shallow, warm water and famously found off the coast of Australia in a "Great Barrier."

ANSWER: **coral reef** (accept either)

(11) You are pulling a rubber box over the concrete ground. For ten points each,

Your applied force must counteract this force that opposes motion. It is caused by attractions between the rubber box and the concrete ground.

ANSWER: **friction**

While the box is moving, this type of friction exists between it and the ground. It is contrasted with static friction.

ANSWER: **kinetic** friction (do not accept rolling or sliding)

Friction is directly proportional to this other force that counteracts the force of gravity on an object. This force is directed perpendicular to the ground.

ANSWER: **normal** force

(12) **One work opens with this character counting "five, ten, fifteen, twenty" as he measures for a new bed. This character is the subject of a trilogy of plays, including *The Guilty Mother*, by Pierre Beaumarchais. He sings "Largo al factotum" to enter an adaptation of one of those plays. In another work, this character's planned (*)** wedding with Susanna survives Count Almaviva's schemes. For ten points, name this barber of Seville who is "married" in an opera by Mozart.

ANSWER: **Figaro**

(12) Byron McKeeby, the artist's dentist, served as one model in this painting; the artist's sister served as the other. For ten points each,

Name this 1930 painting of an elderly couple standing in front of an Iowan house.

ANSWER: **American Gothic**

This American artist painted *American Gothic*, as well as a painting in which three women stand in front of *Washington Crossing the Delaware* called *Daughters of Revolution*.

ANSWER: Grant **Wood**

The original *Washington Crossing the Delaware* was painted by this German artist.

ANSWER: Emanuel **Leutze**

(13) **After this battle, Charles O'Hara presented a sword to Benjamin Lincoln, and a band played the drinking song "The World Turned Upside Down." The Comte de Grasse led the French navy in its blockade of Chesapeake Bay before this battle. This battle, which led to the (*)** signing of the 1783 Treaty of Paris, ended after Lord Cornwallis surrendered to George Washington. For ten points, name this final major battle of the American Revolution.

ANSWER: Battle of **Yorktown** (accept Siege of **Yorktown**)

(13) Name these Italian cities for ten points each.

This rival of Genoa was ruled by doges like Enrico Dandolo. Its system of canals can be traversed by gondolas.

ANSWER: **Venice** (or **Venezia**)

In the 14th century, the Ciompi were laborers in this city that revolted against upper class domination. A century later, the Medici family gained prominence in this city.

ANSWER: **Florence** (or **Firenze**)

This city in Lombardy was ruled by the Visconti and the Sforza families.

ANSWER: **Milan** (or **Milano**)

(14) **In one of this author's short stories, the homeless man Soapy is arrested for loitering. In another short story by this author of "The Cop and the Anthem," Bill and Sam kidnap Johnny, the redheaded son of Ebenezer Dorset, in "The (*)** Ransom of Red Chief." This man wrote another story in which Della sells her hair to buy a chain for Jim's watch, only to discover that Jim has sold his watch to buy combs for Della's hair. For ten points, name this American author of "The Gift of the Magi."

ANSWER: O. **Henry** (or William Sydney **Porter**)

(14) In this book, Richard Hickock and Perry Smith were executed for the murder of the Clutter family. For ten points each,

Name this 1966 true crime novel by Truman Capote.

ANSWER: **In Cold Blood**

The killings central to *In Cold Blood* take place in Holcomb, a small town in this central U.S. state whose capital is Topeka.

ANSWER: **Kansas**

Another Capote work focuses on socialite Holly Golightly, and is titled for *Breakfast at* this high-end jewelry store, whose headquarters are in New York City.

ANSWER: **Tiffany's** (accept Breakfast at **Tiffany's**)

Extra Question

Only read if you need a backup or tiebreaker!

(15) **The trace of a matrix is calculated by adding terms along one of these paths. An n-sided polygon has one-half times n times the quantity n minus 3 of these lines. A three-dimensional polyhedron has two types of these paths: through space and along the (*)** face. According to the above formula, a hexagon has nine of these lines while a rectangle only has two. For ten points, name these paths that cut through a polygon, joining vertices without being sides.

ANSWER: **diagonal**s